

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions and listings of claims in the application.

LISTING OF CLAIMS:

1. (Currently amended) An interface for ~~[[an]]~~ coupling electronic devices, ~~being coupled to a peripheral device, the interface comprising:~~

a first configurable hardware interface, wherein the configurable hardware interface is resident in ~~[[the]]~~ a host electronic device and includes:

a first programmable logic device (PLD);

a first memory coupled to the first PLD;

a first control interface for controlling the first PLD and the first memory;

~~and~~

a first communication interface for receiving information from ~~a~~ the peripheral electronic device and enabling the first control interface, the first communication interface adapted to request a bitstream from the peripheral electronic device responsive to a first signal from the first control interface; ~~and~~

a first storage component residing in the host electronic device and coupled to the first PLD for storing a plurality of bitstreams that configure the first configurable hardware interface to implement a driver of the peripheral electronic device; ~~and~~

a second configurable hardware interface, wherein the configurable hardware interface is resident in the peripheral electronic device and includes:

a second PLD;

a second memory coupled to the second PLD;

a second control interface for controlling the second PLD and the second memory; ~~and~~

a second communication interface for receiving information from the host electronic device and enabling the second control interface, ~~the second~~

~~communication interface adapted to request a bitstream from the electronic device responsive to a signal from the second control interface; and~~

a second storage component residing in the peripheral electronic device and coupled to the second PLD for storing a plurality of bitstreams, each implementing a driver of the peripheral electronic device ~~that configure the second configurable hardware interface to implement an interface compatible with the driver on the first configurable hardware interface;~~

wherein, responsive to a second signal from the first communication interface to the second communication interface, a third signal from the second communication interface to the second control interface, and a fourth signal from the second control interface to the second PLD, the second PLD retrieves a selected bitstream from the second storage component and transmits the selected bitstream to the first PLD, and the selected bitstream implements a driver of the peripheral electronic device on the first PLD.

2. (Previously presented) The interface of Claim 1, wherein at least one of the first and second storage components includes volatile memory.
3. (Previously presented) The interface of Claim 1, wherein at least one of the first and second storage components includes static random access memory.
4. (Previously presented) The interface of Claim 1, wherein at least one of the first and second communication interfaces includes one of a universal serial bus, a parallel port connector, a serial port connector, and a small computer system interface (SCSI).
5. (Currently amended) The interface of Claim 1, wherein the first and second communication interfaces establish synchronous communication between the host electronic device and the peripheral electronic device.
6. (Previously presented) The interface of Claim 1, wherein at least one of the first and second memories includes at least one lookup table.

7. (Previously presented) The interface of Claim 1, further including at least one of an Ethernet interface, a modem interface, and a custom interface for communicating with the peripheral device.

8. (Currently amended) A hardware implemented method of facilitating communication between two devices, the method comprising:

identifying a host device, from the two devices, that controls communication between the two devices;

identifying a peripheral device that accepts commands from the host device;

storing a first plurality of bitstreams in the host device, the first plurality of bitstreams corresponding to a first plurality of drivers;

storing a second plurality of bitstreams in the peripheral device, the second plurality of bitstreams corresponding to a second plurality of drivers of the peripheral device;

determining whether one of the first plurality of drivers is a driver of the peripheral device,

wherein if one of the first plurality of drivers is the driver of the peripheral device, then selecting that a first bitstream corresponding to the driver of the peripheral device and configuring a first programmable logic device (PLD) in the host device with the first bitstream, otherwise, directing the host device to ~~receive~~ request a first second bitstream from the peripheral device;

retrieving the second bitstream from the stored second plurality of bitstreams by a second PLD in the peripheral device in response to the request from the host device, and transmitting the second bitstream from the second PLD to the first PLD;
and

configuring ~~the [[a]] first programmable logic device (PLD) in the host device with the second first bitstream~~ to implement the driver of the peripheral device; and

~~configuring a second PLD in the peripheral device with a second bitstream that implements an interface compatible with the driver implemented in the first PLD.~~

9. (Currently amended) The hardware implemented method of Claim 8, further including storing a plurality of designations in the first PLD, wherein each designation corresponds to one of the first plurality of bitstreams, wherein determining includes searching the plurality of designations.

10. (Previously presented) The hardware implemented method of Claim 9, wherein the plurality of designations are stored in at least one lookup table.

11. (Currently amended) The hardware implemented method of Claim 9, wherein each designation includes an address for one of the first plurality of bitstreams stored in the host device, and wherein selecting includes accessing an address in the host device for the first bitstream to implement the driver of the peripheral device.

12. (Currently amended) A method for configuring an interface, comprising:

storing a first plurality of bitstreams in a first device including a first programmable logic device (PLD), the plurality of bitstreams corresponding to drivers of the first device;

storing a second plurality of bitstreams in the second device including a second PLD, the second plurality of bitstreams corresponding to drivers;

communicating a designation of a driver from [[a]] the first device to [[a]] the second device;

determining at the second device whether a first configuration bitstream associated with the designation of the driver is among the second plurality of bitstreams stored in storage of the second device;

configuring the second PLD with the first bitstream in response to the first bitstream being among the second plurality of bitstreams stored in storage of the second device;

communicating a bitstream request from the second device to the first device in response to the first bitstream being absent from the storage;

retrieving a second bitstream from the stored first plurality of bitstreams by the first PLD in the first device in response to the bitstream request from the second device; and

transmitting, in response to the bitstream request, the second first bitstream from the first PLD in the first device to a second PLD in the second device;

configuring the second ~~a first programmable logic device (PLD)~~ on the second device with the second first bitstream in response to receiving the second bitstream; and

~~configuring a second PLD in the first device with a second bitstream that implements an interface compatible with a driver implemented in the first PLD.~~

13 - 15. (Cancelled)